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|-----------------|-------------|----------------------|---------------------|------------------|
| 09/578,387      | 05/25/2000  | Hidehiko Kando       | 29284/504           | 6130             |

7590 09/11/2003  
Edward W Greason Esq  
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EXAMINER

PSITOS, ARISTOTELIS M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2653

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/578,387

Applicant(s)

KANDO ET AL.

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Information Disclosure Statement***

The IDS of 10/27/00 has been reviewed and made of record.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the steps recited in method claims 1-4 and 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As recited in the ultimate paragraph of independent claim 1, the conversion multiplication factor is set predicated upon a pre-recorded information/control data on the medium. However, there is no positive recitation of any step to detect/distinguish/recognize such. Without such a positively recited step, the setting for the conversion multiplication factor does not occur.

The method limitation found in claim 3 is not understood. How is something accomplished in the absence of the conversion?

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With respect to claim 4, a buffer area is normally interpreted to be that. A buffer and is know, no information is recorded in a buffer zone. That is the intent of a buffer. Further elaboration is respectfully requested.

Additionally, none of the dependent claims clarify the above problem of the parent independent claim and fall therewith.

With respect to claim 5, lines 21-23 recite a desired result, the power level limitation; however, such desired result does not logically follow from the elements positively recited in the claim.

Further elements are required. With respect to the conversion factor, since this is not tied in with the remainder of the system elements recited, it lacks any interrelationship. Further elaboration is respectfully requested.

With respect to claim 6-8, these all recite desired results, but add no further elements to accomplish such.

With respect to claim 9, it suffers for the same reason as stated above with respect to claim 1 predicated upon the lack of any detecting of a pre-recorded information control data.

As far as the claims recite positive limitations, and as interpreted below, the following art rejections are made.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gushima et al further considered with either JP WO98/43241 or EPO 0800276.

The Gushima et al system discloses in an optical recording and reproducing apparatus the ability of controlling the clocking frequency of the information per zone in response to zonal information/control data – see the discussion with respect to figure 4. Although this conversion factor is described as divisional, with respect to the pll, the ability of using a multiplication ability in this environment is well known as taught by either of the secondary references as acknowledged in the submitted search report.

It would have been obvious to modify the base system of Gushima et al with the above teaching from either of the secondary references, motivation is to use alternative hardware and generate a multiplication factor in lieu of a divisional factor (dividing by a number is the same as multiplying by 1/that number). The examiner considers such as substitution of alternative equivalents and obvious to those of ordinary skill in the arts, especially because no unexpected results are seen to occur from selecting between multiplication circuitry and divisional circuitry.

10. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1 above, and further in view of DVD-RAM art.

As acknowledged by applicant DVD-RAM formats exist. Such formats have appropriate buffer regions before and after the data regions. As the zonal factor varies, increases, since the linear data density is kept constant, the buffer area size increases as recited.

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With respect to claim 4, the examiner interprets the claim to mean that as the buffer size area diminishes in size, there is now information recorded therein.

With respect to claims 5-8, and 10 the apparatus elements are considered inherently present in Gushima et al, see figure 6 and its description.

**Conclusion**

a. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

ishizawa also teaches the zonal recording ability with the required variation in clocking/writing frequency.

Torazawa et al – see figure 9 and its description with respect to the variation in frequency due to the zonal ability

Nagasawa, Maeda and Kobayashi et al also all disclose the zonal recording ability and the required need of varying the frequency accordingly. Any of the above noted cited documents could be relied upon in place of Gushima et al as the primary reference in the above noted 103 rejection.

Hard copies of the application files are now separated from this examining corps; hence the examiner can answer no questions that require a review of the file without sufficient lead-time.

Any inquiries concerning missing papers/references, etc. must be directed to Group 2600, Customer Services at (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Aristotelis M Psitos  
Primary Examiner  
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A handwritten signature in black ink, consisting of a stylized 'A' followed by a large loop and a long horizontal stroke.

AMP